

State Election Services Division Lobbyist Reporting Project

Executive Overview

In conjunction with the Governor's wish to make more available to the public through the internet, the State Election Services Division wishes to expand the role of the lobbyist filing.

Lobbyists and lobbying bodies, known as Principals and Public Bodies (PPB), register and report to the State Election Services Division (SESD) as mandated by statute. Registrations for both are bi-annual in alternating years. PPBs register the relationships of their associated designated lobbyist, lobbyists for compensation, lobbyists and employees. The designated lobbyist is responsible for meeting the reporting requirements of the PPB, which entails an annual expenditure report. It is comprised of the expenditures of the PPB, including those of lobbyists, employees and other expenditures. Some lobbyists must also file quarterly reports of their expenditures, namely the designated lobbyists and lobbyists for compensation. Still others are required to file exemption statements from expenditures altogether. The result is at least once per year, every lobbyist within the state must file at the SESD.

The SESD currently uses software designed in-house to track lobbyist registration and reporting. Information is keyed into the lobbyist system from documents filed and then they are retained for five years. As of September 1, 1999, there are 4777 lobbyists registered, 870 principals registered, and 250 public bodies registered. Of those lobbyists, 668 are designated and 493 are lobbyists for compensation. The SESD wishes to expand the lobbyist system to accept electronic filings for the financial and exemption statements of the lobbyists. The documents would be filed out on-line via the Internet and stored in their electronic format for the duration of their retention cycle. In order for the documents to be received and maintained in this manner, digital signatures must be used in this process.

Description

The State Election Services Division of the Office of the Secretary of State is attempting to ease the burden of filing for lobbyists within the state.

The Office of the Secretary of State (SOS) has shown competency and advocacy of the Internet, as most of the information available from the office is presented at <http://www.sosaz.com>. Uniform Commercial Codes, Filing and Registration Forms, Election information, Campaign Finance information and even basic lobbyist information is already present on the Internet. To further the momentum towards a paperless office, the SESD wishes to prove by demonstration the veracity of Internet based electronic forms--Forms to be filled out on-line and stay in electronic format for the life of the document.

The first attempt to replace a paper form with a paperless form was the Limited Telephone Solicitation Registration process. In this process, limited telephone solicitation companies can register their company via the Internet. The statute, A.R.S. 44-1272.01, required the SOS to receive these registrations for informational reference only. (In other words, this is simply a registration process, not a licensing process). The SOS noted that registrations need not required signatures by the limited telephone solicitors. Therefore, an on-line form was developed and deployed to gather the information for the limited telephone solicitors. Since deployment on August 3, 1999, 37 registrations have been filed, 26 through the Internet and 3 over the counter. The process was designed, and performed, to minimize document handling and overall contact time. The concept was to collect information and store that information with minimal veracity of the form, maximum veracity of the information. Though the test field was relatively small (because full telephone solicitation registrations previously required had only accounted for 12 registrations over three years) the proof of concept was achieved. The next attempt will be to

conduct a signature based filing in order to test the concept of electronic documents (information and form presentation) over the document life cycle.

Scope

The scope of the project will be the lobbyists on file with the SESD. There will be four phases: selected lobbyists in beta test; designated and compensated financing statements; all lobbyist financing statements; all principal and public bodies reporting on-line. The total number of subscribers using digital signatures will amount to just over one thousand users: the designated and compensated lobbyists. This will sum to an estimated 4644 quarterly expenditure reports filed by those lobbyists over a year. Since the designated lobbyist actually files the annual expenditure report for the PPB, 1120 annual expenditure reports will also be filed electronically over a year. These electronic documents, just about 5800 per year, will sum to 12,600 documents filed over the two year project. Initial registrations will not be filed electronically, because this will be the point at which the SESD verifies the lobbyist's identity to distribute the digital signature. Perhaps future initial registrations could be handled electronically, but without an existing infrastructure of trust on the electronic realm, there is no foundation to accepting the digital signature. However it should be apparent that the existing scope will cover about 70% of the paperwork filed on behalf of lobbying statute at the SESD.

Current Process

The current paper processes are determined by 41-1232 through 41-1239.

Before any principal (or public body) causes any lobbying to occur on its behalf, the PPB must register with the secretary of state on a written statement, subscribed under oath. These written statements are the forms prescribed by the SESD, namely: the Principal Registration and Schedule A, their authorized lobbyists; the Public Body Registration and Schedule B, their authorized lobbyists; and the employees of lobbyists, Schedule C. In addition, the PPB must report the itemized expenditures on behalf of the PPB to the secretary of state annually.

Any person listed by a PPB on a registration form as an authorized lobbyist shall provide a registration form to the secretary of state, subscribed under oath. During the course of being registered, all designated and compensated lobbyists (of the entire authorized group) must file quarterly reports of expenditures during the previous quarter, with cumulative figures for the previous quarters. In the case of no expenditures, the lobbyist must file an exemption statement. These quarterly reports, four in all, must also be signed under oath.

In addition, the fee imposed upon the authorized lobbyists by the clean elections act, must be acknowledged or exempted in writing annually. This fee is \$100 and should be conducted at the time of registration. Since all authorized lobbyists (and not just designated or compensated) must file this acknowledgement, this transaction should NOT be considered for an electronic document at this time.

New Process

The electronic version of this process will be essentially the same.

PPB and lobbyists shall register on paper with the SESD. At the time of registration, the designated and compensated lobbyists will be registered with digital signatures to be used at the SESD, Election Services Division. By physically interviewing the lobbyist (subscriber), the SESD can be assured that the digital signature is issued solely to that lobbyist (subscriber). At this point, the lobbyist (subscriber) has sole possession of the digital signature. Under the contract to be signed by the lobbyist (subscriber) with the issuing certificate authority (Issuer), the lobbyist (subscriber) must maintain the security of the digital signature certificate for the life of the certificate. If the certificate is to become lost, compromised or permitted to be used by anyone

other than the lobbyist (subscriber), the certificate would become revoked and the lobbyist would be responsible for the misuse of the certificate. This should prompt the lobbyist (subscriber) to report compromises immediately to the certificate authority. If the issuing certificate authority, or their digital signature infrastructure, were to become destroyed or compromised in anyway, the certificates issued would become revoked with instructions to acquire new certificates from an alternate source. Any documents signed using a revoked certificate would NOT be accepted by the SEDS. The signing lobbyist (subscriber) would be notified in writing via certified mail that the document could not be processed. There are no fines associated with late or absent filings, however, late or absent filers are reported to the Attorney General for violation of a misdemeanor. In the event a document is late or absent as the result of an electronic transaction compromise, the filer will be granted an extension to complete the filing for two months. After which, the filer will be reported to the Attorney General if the filing was never completed.

There will be some basic requirements to qualify as a digital signature using lobbyist. First and primary is that the lobbyist is either a designated or compensated lobbyist. Second, the lobbyist is willing to pay a fee for the convenience of filing in an electronic format. Third, the lobbyist must have access to the internet. Fourth, the lobbyist must use software as specified by the SEDS, including operating system, internet browser and additional plug-ins. Fifth, the SEDS may require the lobbyist to lease hardware from the SEDS for a nominal fee (depending on the solutions that come forward).

The expenditure report forms will be replicated to a web based XML. The forms shall be 'signed' by the SEDS. The lobbyist shall download the form off of the internet from the SEDS. Upon opening of the form, the form shall verify with the certificate authority the veracity of the electronic form as presented by the secretary of state. The lobbyist shall fill out the form on-line or offline, which means the forms will be complete within themselves. The lobbyist shall then send (by action of a form 'button') the electronic form to the secretary of state. Upon sending the button, the lobbyist will be asked to identify the digital signature to use (because multiple signatures may reside on a machine) and enter in that digital signature's enabling password. The browser shall use the SEDS's public key and the subscriber's (lobbyist) private key to 'sign' the electronic form as it is posted to the SEDS's web site.

Upon arrival of the post, the server shall identify the sending party by using the name fields from the XML form. Then it shall verify the integrity of the electronic form using the public key of the subscriber (lobbyist) and the private key of the SEDS. If the form is intact, the data shall be parsed and verified for completeness and correctness. If correct and complete, it will be entered into a protected database and entire post of the form shall be attached as a blob¹ within that database. An email will be generated and signed with the SEDS's private key to the lobbyist verifying the form was officially accepted.

Upon an insert into the protected database, the record will be passed to the lobbyist system for actual insertion. The record will be written with a timestamp to a location on a CD or DVD jukebox. The filing shall be identified by a unique filing number and shall contain: the electronic document in XML, plain text, parsed data, and blob format; the public key of the subscriber; the verification of non-revocation from the certificate authority; and the associated hashes of the form and keys. The CD's or DVD's will be sequentially enumerated with timestamp for uniqueness within the SEDS. A physical log (and electronic log) shall be produced identifying the location and filing number of the electronic document. This log and the physical medium of CD or DVD will provide the long term retention of the filed document. The enumeration of the medium and the sequential state of the log shall identify the time period and the write-once CD or DVD shall provide the integrity of the document.

¹ Blob is a term used by database people to indicate any random large block of bits that needs to be stored in a database, such as a picture or sound file. A BLOB is an object that cannot be interpreted within the database itself.

If a subscriber denies signing of the document, the blob can be used to re-authenticate the signed electronic document.

In addition to the processes carried out by the SEDS, the certificate authority will need to retain the registration and key distribution for all subscribers for the life of the document. Because it is not clear as to when the key can actually be used within its life cycle, the certificate authority must maintain these records for FIVE years past the issuance of the last key pair. Also included should be the revocation lists and any information the certificate authority would find necessary to demonstrating to a court the possession of a certificate of an individual at a given point in time.

This project is essential to proving the effectiveness, efficiency and functionality in a paperless office. The SEDS has over one thousand filing lobbyists around the state. Most functions of the department are carried out from the central office at 1700 West Washington Ave. The problem is that for most of those functions, the lobbyist is simply not in the proximity of the central office when these filings need to occur. The present reporting process is a plethora of paperwork that taxes the lobbyist's time and patience, as well as the secretarial work done by the SEDS employees. It is clear that the current method could be substantially made more efficient and effective with an electronic version of the form and process.

Who's, What's & When

This project will be limited to the extranet use of the form(s) by designated and compensated lobbyists on file with the SEDS.

The electronic documents and processing that will be made possible through the internet will significantly improve the efficiency of the department. As mentioned above, the project will be limited to the extranet use by known persons to the SEDS. This provides the department with the control over the process to monitor it closely. Our goal is to replicate the paper transactions with the electronic, therefore the overall process of reporting is relatively unchanged, with the exception that the flow will now be automated.

The SEDS will contract with a vendor to develop XML based expenditure reporting forms that are similar in presentation and function to the paper based form. The forms shall be viewable through an browser add-in, which will be compatible with any computer running Microsoft Internet Explorer 5.0. The forms shall be accessible via the internet, but shall be 'complete' so they may be completed off-line. Acceptance of the forms will be restricted to known digital signature holders by the SEDS. This essentially will be a PKI verification of the sending and receiving parties' documents.

The vendor will also provide the XML parser to store the forms in the data elements (as well as the XML format) in the protected 'intermediary' database run on SOS systems. This database will complement current work flow and interface to the existing lobbying data. It will synchronize on a transaction basis with complete audit logs to ensure accountability of the transactions in process. Access to the database will be restricted to authorized personnel.

Digital signatures will be used as the 'signing' key on the XML forms. Since the scope is limited, each of the possible signers will receive a digital signature from a vendor through the registration process at the SEDS. They will also sign a contract, indicating the use of this digital signature will in fact equate their intentions in altering, reviewing and approving the XML forms. In addition, they will be committed to keeping the digital signature safe and within their sole control. The digital signature will be used to hash the XML form, effectively marking the form such that it can not be altered without invalidating the signature.

Though the digital signature is a basic signature (see the basic certificate policy outlined by the Policy Authority for the State of Arizona at <http://www.sosaz.com/pa>), the certificates are

registered in the Election Services office and therefore can be accepted as a signing certificate. Once the XML form is submitted, the signature will be verified against the vendor's repository. The entire XML form is stored, with the public key obtained from the repository with signature intact. The data elements will also be stored in the record in their data format to allow processing without re-verification. The entire record on write-once medium (CD or DVD), should be sufficient for non-repudiation and later verification of the electronic documents.

The key to replicating the paper process on the internet is to keep the integrity and security of the process, the non-repudiation of the signatures and the retention of the document over its required life span. The SESD feels that all three of these elements are met in the proposed solution. Only two vendors will be involved in the project. One for XML development and the other for Certificate Authority duties.

This project has major implications for little impact of cost. By using the internet as the medium for distribution, the forms and tools need only be designed once. Also, only minimal support from IT staff is necessary to link the intermediary database to the lobbying database. The licensing of the XML forms and browser add-in viewer is determined by the expected use. At this point, purchase of the license by form, rather than user, seems the most cost effective. Of one concern is the training of the personnel involved in the use of on-line forms, digital signatures and the paperless process. It is also expected the vendor will assist with on-site training and self teach videos for the lobbyists. In addition, the contracts will be written such that the SESD owns all created material (including audit logs and historical keys) and programming associated with the entire process.

Time to implementation is fairly short. The major extent of the development of this process is in the analyzing of the paper process. Once the major elements were identified and outlined, it is a short conclusion to the resulting electronic process. The beta test, a designated group of lobbyists and a quarterly report will be completed over an four month period in September-January. Following a successful test under close monitoring, the project will be expanded to full use. Review of the forms produced and the process will be completed every three months for recommendations and commentary. The project shall end on January 1, 2001. Six months prior, a complete review and recommendation to the executive director will be made for either continuance or dismissal of the project. This project is designed to meet all the requirements of a digital (electronic) signature under Arizona law. So analysis of this project will assist the Policy Authority in determining the best methods for use of said signatures.

Risks

The risks involved with this project are minimal. The reporting process is well defined and understood by the department and the lobbyists. Promoting an electronic process, especially when based on a well organized process, allows the employees involved to easily perceive the flow and particulars. The forms and process are not being designed to replace the human element. Though the process will be electronic internally, the process will still seem "paper" to the outside community. Reports and copies will still be printed upon request. Thus the touchability of the process will not be jeopardized. The use of digital signatures is essential to build the knowledge and understanding of using them.

Summary

The SESD believes this project is essential to establishing the rules and procedures surrounding a paperless office. The observation and examination of a real-life project will undoubtedly benefit the department, the state government, and the citizens of Arizona.

There is one small problem though. Statute 41-1236 states:

All reports and statements required under this article shall be made under oath, before an officer authorized by law to administer oaths.

This is a drop dead hindrance to this project. This means, not only do the forms and reports require a notarized signature, they also must be signed under oath that a Notary Public *witnesses*--thus affirming the truth contained therein. Digital signatures can NOT perform this function. Therefore, legislation is introduced to change this statute to read:

All reports and statements required under this article shall be made under oath, before an officer authorized by law to administer oaths or signed by a digital signature as defined by A.R.S. 41-132.

Once accomplished, the oath will remain intact, but a Notary Public to witness the oath will not be required.

Other places the statute needs adjustment are:

...by filing a written statement, subscribed under oath....

The legislation would also need to change that phrase to allow an electronic document as well as a written one:

...by filing either a written statement that is subscribed under oath or an electronic statement signed by a digital signature as defined by A.R.S. 41-132....

...may sign a notarized form ...

The legislation would also need to change that phrase to allow the same effect of an electronic document as well as a written one:

...may sign a notarized form or an electronic statement using a digital signature
...

... written statement

The legislation would also need to change the "written statements" to forms because in electronic documents, format has much more variation than its written cousin. It is always just assumed that the written statement is turned in on paper, and not cloth, rice paper or stone tablets:

...written statement, a form prescribed by the secretary of state, ..

Once the statute is changed, the project shall move forward.